

<b>Quick Stream Gravel Products</b>	)	<b>Departmental</b>
<b>Franklin County</b>	)	<b>Findings of Fact and Order</b>
<b>Salem, Maine</b>	)	<b>Air Emission License</b>
<b>A-780-71-A-N</b>	)	

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

## **I. REGISTRATION**

### **A. Introduction**

Quick Stream Gravel Products (QSG), located in Salem, Maine has applied for an Air emission License, permitting the operation of a crushed stone and gravel facility.

### **B. Emission Equipment**

#### **Rock Crushers:**

<u>Designation</u>	<u>Powered</u>	<u>Process Rate</u> <u>(tons/hour)</u>	<u>Control Device</u>	<u>Date of</u> <u>Manufacture</u>
Jaw Crusher	diesel	200	Spray Nozzles	1979
Cone Crusher	electric	100	Spray Nozzles	1931

#### **Diesel Units:**

<u>Source ID</u>	<u>Max. Capacity</u> <u>(MMBtu/hr)</u>	<u>Max. Firing Rate</u> <u>(gal/hr)</u>	<u>Power Output</u>
Generator #1	1.22	8.9	125 kW
Jaw Drive	0.53	3.8	75 hp

### **C. Application Classification**

The application for QSG is classified as non-major based on the small, unquantifiable rock crusher emissions. The license is for a non-major source and has been processed as such.

## **II. BEST PRACTICAL TREATMENT**

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new units consists of meeting Best Available Control Technology (BACT).

### **A. Rock Crushers**

The Jaw and Cone rock crushers were manufactured in 1979 and 1931 with rated capacities of 200 and 100 ton/hr, respectively. Therefore, the Jaw and Cone rock crushers are *not* subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of Best Practical Treatment (BPT) for control of particulate matter (PM) emissions from the rock crushers, QSG shall operate and maintain water sprays on the rock crushers. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a 6 minute block average basis.

### **B. Diesel Units**

The Jaw Drive is used to power the Jaw Rock Crusher. Generator #1 is used to provide electrical power to the Cone Rock Crusher.

The following is a summary of the BPT for Generator #1 and the Jaw Crusher Drive:

1. Total fuel use in the diesel units shall not exceed 40,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
2. Chapter 106 regulates fuel sulfur content, however the use of 0.05% sulfur by weight fuel is more stringent and shall be used.
3. PM and PM<sub>10</sub> limits are based on emission rates from similar sources.
4. NO<sub>x</sub>, CO and VOC emission limits are based on AP-42 data dated 10/96.
5. Visible emissions from the generators shall not exceed 30% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.

C. Stock Piles and Roadways

BPT for all potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, on a 3 minute block average basis.

F. Facility Emissions and Fuel Use Caps

Based on the total use of 40,000 gal/year (12 month rolling total) of diesel fuel with a sulfur content not to exceed 0.05% by weight, QSG shall be restricted to the following annual emissions:

**Total Allowable Annual Emissions for the Facility**  
(used to calculate the annual license fee)

<b><u>Pollutant</u></b>	<b><u>Tons/Year</u></b>
PM	0.6
PM <sub>10</sub>	0.6
SO <sub>2</sub>	0.2
NO <sub>x</sub>	12.1
CO	2.6
VOC	1.0

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulation Chapter 115, the level of air quality analyses required for a minor **new** source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

**ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

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**Air Emission License**

The Department hereby grants Air Emission License A-780-71-A-N, subject the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. § 353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned

- changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - b. pursuant to any other requirement of this license to perform stack testing.
  - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a

demonstration of compliance under normal and representative process and operating conditions.

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
- (16) **Rock Crushers**
  - a. QSG shall operate and maintain spray nozzles for particulate control on the Jaw and Cone rock crushers. Visible emissions from the crushers shall be limited to no greater than 10% opacity on a 6 minute block average basis.
  - b. QSG shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location.
  - c. QSG shall maintain a log detailing and quantifying the hours of operation on a daily basis for the Jaw and Cone rock crushers. The operation log shall be kept on-site at the rock crushing location.
- (17) **Diesel Units**
  - a. Fuel use records and receipts for Generator #1 and the Jaw Crusher Drive shall be maintained for at least six years and available to the Department upon request.
  - b. QSG shall not exceed the total use of 40,000 gal/year of diesel fuel (12 month rolling total), with a sulfur content not to exceed 0.05% by weight. Emissions

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from the diesel units shall be limited to the following:

<b>Equipment</b>		<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Generator #1	lb/hr	0.15	0.15	0.06	5.38	1.16	0.43
Jaw Drive	lb/hr	0.11	0.11	0.03	2.34	0.50	0.19

- c. Visible emissions from the diesel units shall not exceed 30% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.
- (18) **Stockpiles and Roadways**  
Potential sources of fugitive PM emissions including material stockpiles and unpaved roadways shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, on a 3 minute block average basis.
- (19) **Equipment Relocation**  
a. QSG shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:
- Attn: Relocation Notice  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017
- The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.
- b. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (20) QSG shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

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(21) The term of this order shall be for five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS     DAY OF     , 1999.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA KIRKPATRICK, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/18/99

Date of application acceptance: 10/22/99

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This order prepared by Lynn Ross, Bureau of Air Quality.